





San José-Santa Clara Regional Wastewater Facility Capital Improvement Program

Rebuilding for Operational Reliability, Sustainability, and Regulations

After 60 years of nonstop service protecting public health and the environment, the San José-Santa Clara Regional Wastewater Facility (RWF) needs to be rebuilt. As with much of the nation's infrastructure built in the 1950s and 1960s, RWF components urgently require rehabilitation or replacement. The City is rebuilding and modernizing the RWF through its Capital Improvement Program (CIP), based on the adopted 2013 Plant Master Plan (PMP), to keep the facility working at optimal levels into the future. The PMP recommends more than 114 capital improvement projects over a 30-year planning period. San José is currently implementing the first phase of the recommendation with a 10-year, \$1.4 billion CIP

to address critical rehabilitation needs and ensure operational reliability, improved process performance through newer technologies, and compliance with regulations to protect the environment and southern San Francisco Bay.

The CIP is one of the largest public works projects in San José's history. As it plans and implements the CIP, the City has been inclusive and transparent. We are also hiring firms — including small businesses — among its contractors and vendors for a strong, local economy. All CIP procurement solicitations are listed on the City's website.



Investing in the Future

Rebuilding the RWF now is a smart investment to protect our public health, our environment, and our regional economy. CIP project descriptions, budgets, and schedules are available at www.sjenvironment.org/cip



60 Years of protecting public health and the environment and supporting the Silicon Valley economy

2016-2020 Adopted CIP: Key Projects

Updated on a rolling, five-year basis, the CIP includes infrastructure rehabilitation at all stages of the treatment process for optimal operations and reliability.

Project Name	Benefit	Budget Allocation	Estimated Beneficial Use
Headworks Improvements & New Headworks	This project will construct a new headworks facility with odor controls to replace the 60-year-old structure and modify the existing wet weather headworks to improve operational reliability and performance.	\$122 million	Late 2022
Digested Sludge Dewatering Facility	This project will construct an enclosed mechanical dewatering facility to replace the existing sludge storage lagoons and open air drying beds. This will result in more options for beneficial reuse of the biosolids, reduced odor impacts to the community, and a smaller operational footprint.	\$68 million	Early 2022
Digester and Thickener Facilities Upgrade	The first phase of this project will rehabilitate and convert four anaerobic digesters to thermophilic operations; modify six dissolved air flotation units including odor controls; and construct a new, above-ground gas piping system and new sludge screening and electrical facilities. This will improve operational reliability and safety, increase biogas production, and provide future flexibility. Digester gas is captured and used as a sustainable energy source for the facility.	\$108 million	Mid 2019
Energy Generation Improvements	The Energy Generation Improvements include two projects. The first project will construct four emergency diesel generators that will enable the RWF to remain operational in the event of an extended power outage. The second will construct a new cogeneration facility which includes four new low emissions internal combustion engines; a heat recovery system; and a gas treatment system to improve operational reliability and efficiency, and enable full reuse of the digester biogas to generate heat and power for RWF operations.	\$88 million	Late 2016 & Mid 2019

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The RWF must remain in operation daily; therefore, all CIP construction must occur while ongoing facility operations are underway. Careful scheduling and project phasing are required.

Latest Recognition for Excellence

- 2016: The RWF's Plant Master Plan received the American Planning Association's prestigious National Achievement Award for Environmental Planning
- 2016: The RWF's Plant Master Plan received the American Planning Association Northern California Chapter Award of Merit for Innovation in Green Community Planning
- 2015: The Capital Improvement
 Program received an Achievement
 Award for Organizational
 Excellence from the California
 Association of Sanitation Agencies

All photos \circledcirc Robert Dawson, Courtesy of the City of San José Public Art Collection

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